

App. No. 10/590,420
Office Action Dated April 1, 2008

RECEIVED
CENTRAL FAX CENTER
JUL 01 2008

Amendments to the Claims:

This listing of claims will replace all prior versions and listing of claims in the application.

Listing of Claims:

1. (Currently Amended) A glass composition comprising the following components, indicated by mol%:

40 to 85 GeO_2 ;

0.5 to 33 Al_2O_3 ;

0 to 30 Li_2O ;

0 to 30 Na_2O ;

0 to 30 K_2O ;

0.5 to 35 MgO ;

0 to 30 CaO ;

0 to 30 SrO ;

0 to 30 BaO ;

0 to 25 ZnO ;

0 to 10 TiO_2 ;

0 to 5 ZrO_2 ; and

0 to 20 SiO_2 ,

wherein the total of $\text{MgO}+\text{CaO}+\text{SrO}+\text{BaO}+\text{ZnO}+\text{Li}_2\text{O}+\text{Na}_2\text{O}+\text{K}_2\text{O}$ is in the range of 3 to 40 mol%,

the glass composition further includes bismuth oxide,

the content of bismuth oxide in terms of Bi_2O_3 is 0.01 to $[[15]] \leq$ mol%, and

bismuth contained in bismuth oxide functions as an emission species and the glass composition emits fluorescence in the infrared wavelength region by irradiation of excitation light.

2. (Original) The glass composition according to claim 1, which has an optical absorption peak in the wavelength range of 400 nm to 1100 nm.

App. No. 10/590,420
Office Action Dated April 1, 2008

3. (Original) The glass composition according to claim 1, wherein the wavelength at which the intensity of fluorescence induced by the irradiation of excitation light with wavelength in the range of 400 nm to 1100 nm is 15 maximum is in the range of 900 nm to 1600 nm.
4. (Original) The glass composition according to claim 1, wherein a half width to the wavelength of the fluorescence is at least 150 nm.
5. (Original) The glass composition according to claim 4, wherein the half width to the wavelength of the fluorescence is at least 320 nm.
6. (Original) The glass composition according to claim 1, which provides gain of signal light in at least a part of the wavelength range of 900 nm to 1600 nm.
- 7-15. (Canceled)
16. (Original) An optical fiber comprising the glass composition according to claim 1.
17. (Original) An optical amplifier comprising the glass composition according to claim 1.
18. (Original) A method of amplifying signal light, comprising injecting excitation light and signal light into the glass composition according to claim 1 to amplify the signal light.
19. (New) The glass composition according to claim 1, wherein the content of LiO_2 is 0.1 to 30 mol%.